

DRAFT
FINDING OF NO SIGNIFICANT IMPACT

**CONSTRUCTION OF THE
MAUI CONSOLIDATED READINESS CENTER (MCRC)
PULEHUNUI (PUUNENE), MAUI, HAWAII**

1.0 Introduction and Description of Proposed Action: The Hawaii Army National Guard (HIARNG) proposes the construction, in Project District 10, of the MCRC for consolidation of existing operations located on Maui. The size and age, of the existing facilities, and lack of space for expansion of these buildings, make them inadequate for current mission essential requirements. This Environmental Assessment (EA) addresses the consolidation and relocation of Organizational Maintenance Shop (OMS) #3 and the Kahului Armory to a 30-acre site in Puunene, Maui, Hawaii. The proposed action, construction of the MCRC and adjacent helipad, complies with current state and federal environmental laws and building codes. The proposed construction includes: (1) a new armory for administrative and readiness training, (2) OMS to meet minor vehicle maintenance and mission needs, and (3) a helipad to provide a landing site for infrequent helicopter landings and use during civil emergencies or natural disasters.

2.0 Project Alternatives Considered

The EA evaluates several alternatives to the proposed action construction. The HIARNG identified a set of preliminary sites including Waikapu, Kaahumanu Avenue, Maui High School, and Puunene. Based on screening criteria noted in the EA, the disadvantages of the Waikapu, Kaahumanu Avenue, and Maui High School alternatives outweighed the advantages, rendering them infeasible. The HIARNG found that only the Puunene location was feasible.

The HIARNG examined three sites on the Puunene location. However, drainage and engineering problems eliminated most options. In the end, feasible alternatives consisted of different armory designs and layouts on the same 30-acre site. In evaluating different designs and layouts within the Puunene site, the HIARNG considered mission requirements, functional needs, buffers from neighbors, and space for potential expansion.

3.0 Anticipated Environmental Impacts

The HIARNG does not expect the proposed action to result in significant adverse impacts on environmental or socioeconomic resources at the proposed location or the surrounding area. No federally listed wetlands, threatened or endangered species, prime or unique farmlands, or wild and scenic rivers are present at the proposed location.

The State of Hawaii Department of Accounting and General Services (DAGS) prepared a Phase 2 Environmental Site Assessment (ESA) dated June 2002 for the proposed construction site. The report recommends that no further investigation is required for suspected asbestos-containing building materials, lead based paints, PCB containing equipment and Underground Storage Tanks (USTs). The ESA concludes that further delineation of potential petroleum contamination is not required. Regarding the need for additional sampling for pesticide contamination, the report states that no further action by the HIARNG is apparent. Specifically, the report states: "Based on the limited sampling performed to screen for chlorinated pesticides and herbicides, no further action is apparent due to the in-situ concentrations not exceeding current risk-based regulatory goals." NGB technical staff reviewed this report and concur with its findings. This ESA is included in the Appendix to the EA.

The HIARNG has completed National Historic Preservation Act (NHPA) §106 consultation with the Hawaii State Historic Preservation Department (SHPD). The HIARNG and SHPD agree that the proposed action would not result in any adverse effects on historic properties.

4.0 Regulations

Implementation of this proposal will not violate any Federal, State, or local environmental laws or regulations, provided incorporated mitigated measures (as specified in this EA) are fully implemented in accordance with the National Environmental Policy Act, the Council on Environmental Quality Regulations (40 CFR Part 1500), and Army Regulation 200-2, *Environmental Analysis of Army Actions*.

5.0 Public Review and Comment

Copies of the Final EA and Draft Finding of No Significant Impact (FNSI) will be made available for a 15-day final public review and comment period. The Final EA and FNSI will be available at The Kahului Public Library, 90 School Street, Kahului, HI 96732; The Kihei Public Library, 35 Waimahaihai Street, Kihei, HI 96753; The State of Hawaii Department of Defense, Office of the Adjutant General, 3949 Diamond Head Road, Honolulu, and the State of Hawaii Department of Defense website, WWW. DOD. STATE. HI. US \ report. Written comments on the Draft FNSI and Final EA should be returned no later than 15 days after the date of official publication. Individuals wishing to provide comments or request information concerning this action may do so by writing to the Hawaii Army National Guard Public Affairs Office, ATTN: Major Charles Anthony, 3949 Diamond Head Road, Honolulu, Hawaii 96816.

6.0 Finding of No Significant Impact

The proposed action is in consonance with the intended land uses in Project District 10 located in Puunene. Project District 10 is intended to be an expansion area that will meet future recreational needs and provide areas for industrial activities, including governmental facilities such as the MCRC, whose locations are better suited away from urban areas.

After careful review of the EA, I have concluded that implementation of the proposed action would not generate significant controversy, or have a significant impact on the quality of the human or natural environment. Per AR 200-2, the Final EA, and Draft FNSI will be made available for a 15-day public review and comment period. Upon successful completion of this action, the FNSI will be signed and the action will be implemented. This analysis fulfills the requirements of the National Environmental Policy Act and Council on Environmental Quality regulations. An Environmental Impact Statement will not be prepared, and the National Guard Bureau is issuing this Finding of No Significant Impact.

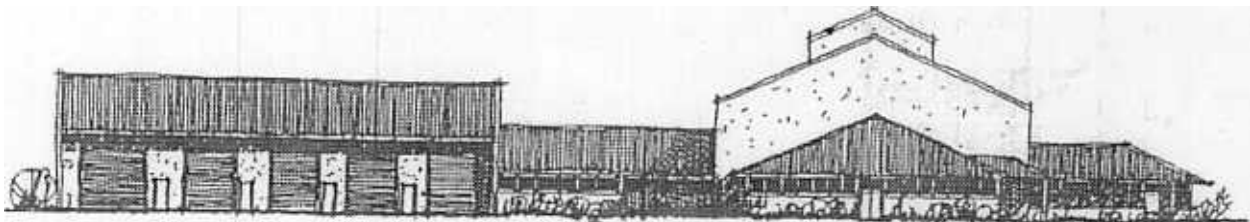
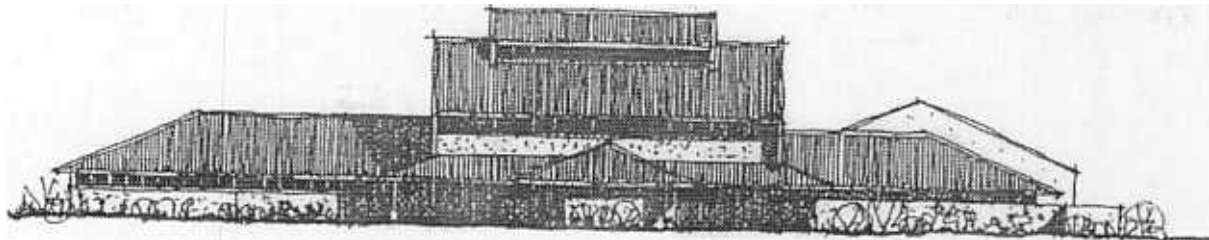
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Final
Environmental Assessment

Construction of the Hawaii Army National Guard's
Maui Consolidated Readiness Center
Pulehunui (Puunene), Maui, Hawaii



Prepared for the
National Guard Bureau and the
State of Hawaii Department of Defense
by the Facilities Management Office

August 2002

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LEAD AGENCY: National Guard Bureau (NGB)

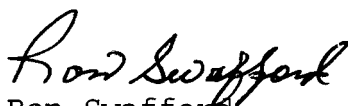
TITLE OF PROPOSED ACTION: Construction of the Hawaii Army National Guard's Maui Consolidated Readiness Center, Pulehunui (Puunene), Maui, Hawaii

AFFECTED JURISDICTIONS: State of Hawaii/ County of Maui

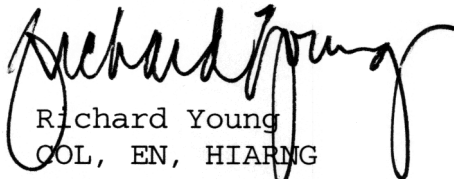
POINT OF CONTACT: Major Charles Anthony, State of Hawaii Department of Defense, Public Affairs and Education Officer, (808) 733-4258, 3949 Diamond Head Road, Honolulu, Hawaii 96816-4495

PROPONENTS: State of Hawaii Department of Defense (DoD), Hawaii Army National Guard (HIARNG), State of Hawaii Department of Accounting and General Services (DAGS), National Guard Bureau (NGB).

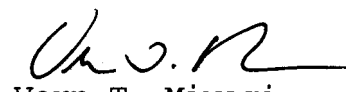
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DOCUMENT DESIGNATION: Environmental Assessment (EA)

ABSTRACT: The U.S Army National Guard Bureau (NGB), Hawaii Army National Guard (HIARNG) proposes the construction of the HIARNG Maui Consolidated Readiness Center (MCRC) for military training purposes as the size, age of the structures, and lack of space for expansion make the existing HIARNG facilities inadequate for current mission needs. This Environmental Assessment (EA) addresses the consolidation and relocation of Organizational Maintenance Shop (OMS) #3 and the Kahului Armory to a 30-acre site in Puunene, Maui, Hawaii. This project is necessary to maintain the proficiency levels of the National Guard units training in Hawaii to ensure compliance with their mission in the event of a State or Federal emergency.

This EA evaluates the individual and cumulative effects of the Proposed Action and the No Action Alternative with respect to a variety of criteria established by the NGB including the Location and Land Use, Air Quality, Noise, Geology and Soils, Water Resources, Biological Resources, Cultural Resources, Socio-economics, Environmental Justice, Infrastructure, and Hazardous Materials.

The evaluation conducted in this EA concludes that implementation of the proposed action would not result in significant environmental effects, individually or cumulatively, to the local environment. Therefore, an Environmental Impact Statement (EIS) is not required. The HIARNG anticipates a Finding of No Significant Impact (FNSI).

In June 2000, Munekiyo, Arakawa, and Hiraga, Inc. filed a separate Draft "State" EA for public comment and in April 2001 filed the Final EA to fulfill the State of Hawaii EA process under Chapter 343, Hawaii Revised Statutes (HRS). The final EA, which addressed Agency and Public comments, was filed under the title " HIARNG Puunene Armory and Related Improvements." The proposed project required a "State EA" since it involves helicopter functions, the use of State land and State funds. A copy of the "State EA", including public comments, is on file at the HIARNG Environmental Office.

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- A. Preliminary Engineering Report - March 2001
- B. Archaeological Inventory Survey - October 1998
- C. Traffic Impact Report - December 1999
- D. Environmental Site Inspections/Assessments
- E. DOH Correspondence letters
- E. State Historic Preservation Letters
- F. Department of General Services & Accounting letter
- G. A.K. Sinoto Consulting Letter - August 4, 1999
- I. Public Notice and Response to Public Notice

SECTION 1.0: PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 Introduction. The Hawaii Army National Guard (HIARNG) proposes the construction of the Maui Consolidated Readiness Center (MCRC) which would include the consolidation and relocation of two (2) existing HIARNG facilities to Pulehunui, Maui, Hawaii. These existing facilities include OMS #3 located in Paukukalo and the armory of "C" Company, 2nd Battalion, 299th Infantry situated in Kahului. Identified by TMK 3-8-08: por. 01 and consisting of approximately 30 acres, the subject property occupies a portion of the old Puunene Airport (aka, old Maui Airport) and the FNAS (FNAS) Puunene.

Remnants of the FNAS's runways and taxiways comprise the majority of the project site, while remnants of the airport's structural foundations encompass the western and southern portions of the site. A small crop dusting facility, Murrayair, Ltd., was located on the southwest portion of the property. The remaining and intervening portions of the site are vegetated by kiawe, klu, and other dry shrubs and grasses.

The project site is bordered on the north by sugar cane fields, on the east by remnants of the old airport, on the south by a paved access road to the Maui Raceway Park, and on the west by Mokulele Highway, a two-lane, asphalt paved state roadway. Access to the site is presently provided from Mokulele Highway via the Maui Raceway Park access road. A Regional Location Map is provided as Figure 1.

The land underlying the subject property is owned by the State of Hawaii. The project site is located in the State "Agricultural" district and is designated "Project District 10" and "Agricultural" by the Kihei-Makena Community Plan and Maui County zoning, respectively.

In May 1995, Helber Hastert & Fee, Planners, Inc. prepared a master plan for the old Puunene Airport area. This area, which includes the project site, encompasses approximately 1,875 acres of State-owned land formerly occupied by the old Puunene Airport and Naval Air Station Puunene. Of this acreage, 1,500 acres are used for sugarcane cultivation by Hawaiian Commercial & Sugar Co., Ltd. (HC&S), a subsidiary of Alexander & Baldwin, Inc. which holds the general lease (S-4197) for this land. About 371 acres of this land is uncultivated and is categorized as "waste land" by the lease. Of this "waste land", approximately 273 acres is located at the site of the FNAS Puunene. Portions of runway and taxiway remnants from the old Airport and FNAS were used for crop dusting operation/storage facility and recreational purposes. Designated

as the "County Project Area" by the master plan, this 273-acre area is planned for non-agricultural uses and is located within the limits of Project District 10. The "County Project Area" is further subdivided into a "Government Complex" for State and County facilities and a "Recreational Complex" for motorized sports.

As noted in the master plan, the proposed project was originally planned for 30 acres of land at the south end of the Mehamaha Loop intersection with Mokulele Highway. Subsequently, however, this site was included as part of the 16,518 acres of public lands that was transferred to the Department of Hawaiian Home Lands. The Department of Land and Natural Resources approved the transfer of these lands with a provision that these lands remain in sugar production until sugar no longer remained a viable commodity within the State.

As the result of these occurrences, a new location for the HIARNG MCRC was provided in the "Government Complex" portion of the County Project Area in an area designated for State base-yard uses. This location is the site of the proposed project.

The State of Hawaii Department of Accounting and General Services (DAGS) performed environmental site assessments (ESAs) of the property in preparation for HIARNG occupancy.

1.2 Purpose and Need. The HIARNG proposes the consolidation of existing HIARNG facilities located on Maui as the size, age of the structures, and lack of space for expansion make the existing HIARNG facilities inadequate for current mission needs. Due to these reasons, the armory and OMS operations would be consolidated and relocated to a new centralized site called the MCRC located within Project District 10. This project district encompasses 561 acres and is located in the vicinity of the old Puunene Airport. The project site is included in an area of approximately 253 acres adjacent to Mokulele Highway that is not planted in sugar cane.

Of the remaining project district lands, about 125 acres, including and adjacent to the site of the Hawaiian Cement quarry, are intended for heavy industrial use, while most of the remaining 189 acres, between Mokulele Highway and Mehamaha Loop, are planted in sugar cane and will remain as such until sugar production no longer remains a viable commodity within the State.

The objective of this project district is to establish an expansion area that will meet future recreational needs and provide areas for industrial activities, including governmental facilities whose locations are better suited away from urban

areas. Future governmental uses include the Maui Economic Opportunity, Inc. (MEO) transportation facility to the east of the property, as well as State and County base-yards, maintenance, and training facilities. In addition to these adjoining uses, recreational users, as well as the County fairgrounds are intended for this project district. In this regard, the proposed project would provide an area for HIARNG facilities that is in consonance with the objectives of Project District 10.

On a short-term basis, the proposed project would benefit the island's economy by providing employment during construction and supporting construction-related suppliers and services. Upon completion, the project would provide immediate and long-term benefits by improving the training and operational efficiency of HIARNG personnel.

1.3 Scope of Document. This EA identifies the actions, alternatives, sites, and resources associated with the HIARNG proposal to construct the MCRC, which includes the consolidation and relocation of the HIARNG's existing facilities on Maui. The procedure included developing criteria, identifying alternatives, evaluating alternatives, analyzing impacts on resources, and the selection of a preferred alternative.

SECTION 2.0: DESCRIPTION OF THE PROPOSED ACTION

The consolidation and relocation of the armory and OMS involves construction of the MCRC on a 30-acre site within the footprint of the FNAS Puunene and near the old Puunene Airport. A Preliminary Site Plan is provided as Figure 2.

Conceptually, the new armory would be about 29,000 square feet and will include classrooms, offices, restrooms/showers, locker and storage rooms, and special function and physical fitness areas. Other armory improvements include a kitchen, a break area, an assembly hall, a learning center, and a library/classroom. The new OMS building would be approximately 6,600 square feet and include offices, workbays, restrooms/showers, locker and storage rooms, and special function areas. Other OMS improvements include about 22,000 square feet for a wash platform, a lube/inspection rack, a service access apron, and military vehicle storage. A helipad, a State storage facility, a Civil Defense warning siren, an area for a future post exchange, and parking spaces for vehicles owned by armory and OMS personnel would also be provided on the project site. A Preliminary MCRC (the Armory/OMS) Floor Plan and Conceptual Building Elevations Plan are provided as Figures 3 and 4, respectively.

The proposed helipad would be designed and operated in accordance with U.S. Army standard outlined in Training Manual (TM) 5-803-7. In addition to serving as a stop-over point for helicopters carrying cargo and personnel during HIARNG training exercises within the State, the helipad would be used to support civilian authorities as well as to be available for emergency medical use. Helipad use (for HIARNG training exercises) is expected to average two (2) takeoffs and two (2) landings over one weekend period per month. During annual training exercises, which are held over a two-week period at Schofield Barracks on Oahu or the Pohakuloa Training Area on the Big Island, helipad use is expected to involve three (3) to five (5) takeoffs and three (3) landings during the beginning and end of this period, respectively. See Figure 2 for helipad location in reference to the proposed MCRC.

The HIARNG currently utilizes CH-47 (cargo) and UH-60 (utility) helicopters. Flight tracks for approaching and departing helicopters would be formulated to avoid residential areas and be consistent with current flight paths for local airport traffic; no night flights would be involved nor would helicopters be stationed at the project site. In addition, no refueling or maintenance activities would be performed at the site.

The estimated cost for the proposed project is approximately \$11.0 million; construction of the project is anticipated to take about twelve (12) months and would commence upon the receipt of all applicable regulatory permits and approvals.

The proposed project would involve the use of State lands and funds, as well as the construction of a helicopter-landing pad; accordingly, an EA has been prepared to fulfill the requirements of the State EA process. Since the proposed project would also include the use of Federal funds, this EA is being prepared by the HIARNG for processing on a separate basis in accordance with the provisions of the National Environmental Policy Act (NEPA) of 1969.

In addition, since the project site is in the State "Agricultural" district and is designated "Agricultural" by County zoning, applications for a State Land Use Commission Special Use Permit and County Conditional Permit would be prepared for the proposed project.

SECTION 3.0: ALTERNATIVES

3.1 Alternatives Development. The HIARNG used the following screening criteria to identify alternatives:

- Mission Readiness
- Land area large enough to accommodate consolidation.
- County master planned for industrial use
- Centralized location.
- State-owned land.
- Approved location for helicopter use.
- Good topography
- Proper drainage

The HIARNG identified a set of preliminary sites including Waikapu, Kaahumanu Avenue, Maui High School, and Puunene. The Waikapu site was not zoned for industrial uses; the Kaahumanu Avenue site is located close to a residential and hospital, not zoned for industrial uses; and the State of Hawaii provided the Maui High School site to the University of Hawaii. Based on one or more of the above screening criteria, the disadvantages of the Waikapu, Kaahumanu Avenue, and Maui High School alternatives outweighed the advantages rendering them infeasible. Only the Puunene area was feasible.

Within the Puunene area, the HIARNG examined three sites. However, drainage and engineering problems eliminated most options. In the end, feasible alternatives consisted of different armory designs and layouts on the same 30-acre site. In evaluating different designs and layouts within the Puunene site, the HIARNG considered mission requirements, functional needs, people and equipment activities, adjacencies, buffers from neighbors, and space for potential expansion.

3.2 Alternatives Considered. Based on the screening criteria in Section 3.1, the HIARNG identified three feasible alternatives, including the "No Action" alternative. This EA analyzes the potential environmental impacts of the following three alternatives.

Alternative 1), The Preferred Alternative. Alternative 1 represents the proposed action. This alternative provides for the development of a component of Project District 10, which is consistent with the project site's land use designation in the Kihei-Makena Community Plan. The proposed development is in keeping with existing and planned land uses in the surrounding area.

Alternative (2), Alternative Designs and Layouts. The HIARNG evaluated alternative armory designs and layouts on the same site. None of the alternative designs and layouts met the operational, functional and development criteria as efficiently as the preferred alternative. Since each of the alternative designs occupy the same Puunene property and have essentially identical environmental consequences, this EA considers these design options as a single alternative.

Alternative (3), No Action alternative. Alternative 3 is the no action or no build alternative which would not affect specified resource areas as the site would remain status quo. The majority of the project site is occupied by runway and taxiway remnants of the FNAS Puunene, while the remainder of the site consists of scrub vegetation. The no action or no build alternative would involve a continuation of the underutilized and unmaintained nature of the property. The no action alternative is not considered a viable scenario in the context of the property's established land use allocation set forth by the Kihei-Makena Community Plan, the Puunene Airport Area Master Plan, and current facility requirements of HIARNG.

SECTION 4.0: AFFECTED ENVIRONMENT

4.1 Location. The proposed project site is located within the old footprint of FNAS Puunene cantonment area and the old Puunene airport at approximately 20 degrees 50' north latitude and 156 degrees 28' west longitude on the central isthmus of Maui. The isthmus connects two separate volcanoes, Puu Kukui to the west and Haleakala to the east. The most recent eruption occurred in 1790 on the southwest flank of Haleakala.

The proposed project site is approximately 2.0 miles from Kihei and 6.0 miles from Kahului. This area is centrally located between the major population centers of Central, South, and West Maui. The lands surrounding the project area are currently utilized for sugar cane cultivation by HC&S.

The Kihei Coast is generally sunny, warm and dry during the entire year. In Kihei Town, the average annual high temperature is 86 degrees Fahrenheit with the average low temperature being 63 degrees Fahrenheit. June through August are historically the warmer months of the year while the cooler months are January to March. Average rainfall distribution in the Kihei-Makena region varies from under 10 inches per year to 20 inches per year in the higher elevations. Rainfall in the Kihei-Makena region is highly seasonal, with most of the precipitation occurring in the winter months. Northeast tradewinds prevail approximately 80 to 85 percent of the time. Winds average 10 to 15 miles per hour during afternoons with slightly lighter winds during mornings and nights.

Between about October and April, the southerly winds of Kona storms may be felt. These storm winds, as well as the trades, are occasionally strong enough to damage vegetation and structures. In the absence of tradewinds and of nearby storms, winds may become light and variable

4.2 Land Use. Land uses in the vicinity include the Maui Humane Society's facility located on Mokulele Highway, about 1.0 mile to the north of the project site, and Hawaiian Cement's quarry operations situated approximately 1.3 miles to the east of the site. No residential areas are located within 2-miles of the proposed project area.

Prior to the construction of the old Puunene Airport and FNAS Puunene, the lands within the project area were primarily utilized for sugar cane cultivation. Puunene Airport replaced an earlier airport located in Maalaea and for more than a decade, was the main commercial airport for the island of Maui. In 1939, Inter-Island Airways constructed a terminal/administrative building at the Puunene Airport which served 16-passenger Bailey clippers on flights to and from Hilo and Honolulu (Maui News, June 1999).

FNAS was developed and expanded just prior to and during World War II. At the height of its operations the naval air station contained personnel quarters, training facilities, a chapel, a dispensary, a movie theater, and a miniature golf course. In addition, two (2) runways of 6,000 feet or longer were constructed, as well as taxiways, weapons magazines, and aviation gasoline tanks (PBR Hawaii, March 1997). Based on historical reports no bombing or firing ranges were constructed as part of base requirements.

In 1948, Naval Air Station Puunene was transferred back to the Territory of Hawaii from the United States of America. The naval

air station facilities, most of which were wooden structures, were abandoned and demolished (Helber Hastert, May 1995).

During World War II, the U.S. Navy constructed a naval air station in Kahului. In 1950, Naval Air Station Kahului was transferred to the Territory of Hawaii and commenced operations as the Kahului Airport. The opening of the Kahului Airport resulted in the closure of the Puunene Airport since the new airport provided a superior location and facilities, as well as relief from the strong winds encountered on the approach to the old airport (Maui News, June 1999).

Since the closure of the old Puunene Airport and FNAS Puunene, the lands within the project area have been utilized with the exception of a small crop dusting storage facility and occasional recreational purposes (i.e. a dirt raceway track).

Scenic resources to the east and west of the project site include Haleakala and the West Maui Mountains, respectively. To the south of the project area, the shoreline, Kealia Pond National Wildlife Refuge, and the offshore islands of Lanai, Molokini, and Kahoolawe comprise scenic resources which can be seen along the Kihei coast. The project site is not located within a scenic view corridor.

4.3 Air Quality. According to current EPA Region 9 air quality attainment designation maps, the Kihei-Makena region is either unclassifiable or in attainment for ozone (O_3), carbon monoxide (CO), particulates (PM_{10}) and nitrogen dioxide (NO_2) and is not exposed to adverse air quality conditions. Available ambient air quality data for the Kihei region indicates that particulate matter concentrations and sulfur dioxide concentrations meet Federal and State air quality standards. There are no fixed sources of emissions in the region although sugar cane harvesting activities may affect levels of carbon monoxide and suspended particulate matter. These conditions are intermittent and of temporary duration. Motor vehicle emissions and particulate matter from construction activities are the primary source of indirect emissions in the region.

4.4 Noise. There are no significant fixed noise generators in the vicinity of the project site. Background noise in this locale can be attributed to traffic traveling along Mokulele Highway. In addition, occasional drag racing activities and distant aircraft flying by contribute to noise conditions in the area. Currently the HIARNG does not have a state-wide Noise Management Plan (NMP) that includes the subject site. In July 2002 the HIARNG submitted a funding request to NGB for development of a NMP.

4.5 Geology and Soils. The project site generally slopes from 0 to 3 percent in a southwesterly direction. Remnants of the FNAS's runways and taxiways cover the majority of the site.

Underlying the proposed site is the Pulehu-Ewa-Jaucas soil association. This series consists of well-drained soils on alluvial fans and stream terraces and in basins. These soils developed in alluvium washed from basic igneous rock. The soil types specific to the project site are Ewa cobbly silty clay loam (EcA), 0 to 3 percent slopes and Pulehu cobbly silt loam (PrA), 0 to 3 percent slopes. Ewa cobbly silty clay loam (EcA) occurs on alluvial fans and terraces and is mostly used for sugar cane cultivation. Permeability is moderate, runoff is very slow, and the erosion hazard is no more than slight. This soil is cobbly on the surface. Pulehu cobbly silt loam (PrA) is also used for sugar cane cultivation and is found in basins and on alluvial fans and stream terraces. Permeability is moderate, runoff is slow, and the erosion hazard is no more than slight. This soil contains many cobblestones on the surface and occasionally throughout the profile. Coral sand may occur at a depth of 20 to 36 inches. Soils Association and Soils Classification Maps are provided as Figures 5 and 6, respectively.

The University of Hawaii Land Study Bureau's Detailed Land Classification - Island of Maui, establishes a soil productivity rating from "A" to "E", with "A" reflecting the highest level of productivity and "E" representing the poorest. This rating system is based on factors such as slope, drainage, rainfall, texture, stoniness, elevation, clay properties, and machine tillability. The project site has a soil productivity rating of "E", which is very poorly suited for agricultural production, and "U", which represents lands which are already in urban use. The lands on the site rated "U" correspond to the area comprising the old Puunene Airport.

In 1977, the State Department of Agriculture established a classification system for identifying Agricultural Lands of Importance to the State of Hawaii (ALISH), primarily, but not exclusively on the basis of soil characteristics. The three (3) classes of ALISH lands are: "prime", "unique", and "other". As indicated by the ALISH map, the project site falls within the "prime" agricultural land category. The ALISH Map is provided as Figure 7.

The State Department of Agriculture notes that the classification of agricultural lands does not in itself constitute a designation of any area to a specific land use but should serve as a decision-

making tool for various land use options for the production of food, feed, forage, and fiber crops in Hawaii.

4.6 Water Resources. The project site generally slopes 0 to 3 percent in a southwesterly direction. The FNAS remnants cover a major portion of the project site. The remaining portion of the site primarily consists of dry brush and kiawe trees.

Onsite runoff typically sheet flows in a southerly direction towards the southwest corner of the project site. It appears there is no existing underground drainage system within the site. Based on a 50-year, 1-hour storm, runoff generated on the existing site is approximately 89.1 cubic feet per second (cfs). See Appendix A.

As indicated by the Flood Insurance Rate Map (FIRM) for the region, the subject property is located in an area designated Zone "C", an area of minimal flooding. The project site is located well beyond the limits of tsunami inundation. The FIRM Map is provided as Figure 8.

According to the State of Hawaii Underground Injection Control (UIC) program the aquifer/groundwater beneath the site is located seaward of the UIC line. Groundwater located seaward of the UIC line is not considered a source of drinking water.

4.7 Biological Resources. Lands surrounding the project area are presently planted in sugar cane. The project site itself has been utilized in the past for sugar cane cultivation, as well as for airport operations. The implementation of these past uses has resulted in the removal of plant life typically found in the area, such as kiawe, koa haole, and various weeds and grasses.

Presently, remnants of the old Puunene Airport occupy the majority of the project site. Existing vegetation on the remaining portions of the site is characterized by kiawe, klu, and other dry shrubs and grasses. There are no known rare, threatened, or endangered plant species in the vicinity of the subject property.

Animal life in the vicinity is typical of species found in the urbanized areas of Kihei. Exotic species of birds commonly found in the region include the House Finch, Northern Cardinal, and Gray and Black Francolin. Feral mammals generally found in the area include cats, rats, mice, and mongoose. There are no known rare, threatened, or endangered species of fauna or avifauna found in the vicinity of the project site. In addition, the U.S. Department of the Interior's National Wetlands Inventory Map does

not reveal any wetland areas located within or in close proximity of the subject property.

4.8 Cultural Resources. An Archaeological Inventory Survey of the project area was conducted by Aki Sinoto Consulting on behalf of GYA Architects (GYA) for the HIARNG in October 1998. Prior to the survey, which encompassed about 35 acres, consultation with the State Historic Preservation Division (SHPD) determined that subsurface testing would be unwarranted due to the nature and extent of previous disturbances caused by long-term agricultural activities, as well as by the initial construction of the old Puunene Airport and the subsequent development of the FNAS Puunene (Site 50-50-09-4164).

Fieldwork consisted of walking parallel transects at 20 to 30 meter intervals throughout the project area. Portions of paved runway and taxiway remains covered about 50 percent of the survey area, while concrete bunkers, walkways, building foundations, and recreational areas occupied areas adjoining the runways and taxiways. No un-modified areas, such as gulches or drainage features, occur within the project area.

The survey identified runways and taxiways associated with the FNAS Puunene, as well as handball courts, a swimming pool complex, intact bunkers or splinter shelters, and over 15 concrete structural foundations. Due to the intensive, land-altering activities associated with the development of the FNAS Puunene, the entire survey area was impacted. Approximately two-thirds of the splinter shelters are located on lands belonging to State of Hawaii but not in control of the HIARNG. The remaining one-third is located on HIARNG land, however, outside of the construction and fenceline area.

Much of the runway and taxiway areas within the survey area are still intact, however, all of the building superstructures in these areas, from the 1939 to 1947 era, were demolished in 1947 and remain only as concrete foundations. The majority of the remains are located in the kiawe thicket along the western portion of the project area between Mokulele Highway and the taxiway. Two (2) other isolated remains, an intact bunker and a high three-sided structure, were located in the peripheral areas. A copy of the survey is provided in Appendix B.

No tribal lands or resources exist on or adjacent to the proposed location. In addition, Department of Defense policy specifically excludes Native Hawaiians as a recognized Native American tribe. However, DAGS sent the aforementioned state EA to the State of Hawaii and associated native groups for review and comment. No

impact or potential impact to native Hawaiian lands or resources were noted.

4.9 Socioeconomics. The population of the County of Maui has exhibited relatively strong growth over the past decade, with the 1990 population estimated to be 100,504, a 41.8 percent increase over the 1980 population of 70,847. Growth in the County is expected to continue, with the resident population projection for the year 2010 estimated to be 140,060 (Community Resources, Inc., 1994).

Just as the County's population has grown, the resident population of the region surrounding the project site has increased dramatically in the last two decades. Population gains were especially pronounced in the 1970's as the rapidly developing visitor industry attracted many new residents. The current resident population of the Kihei-Makena region is estimated to be about 20,000, while a projection of the resident population for the year 2010 is estimated to be 23,542 (Community Resources, Inc., 1994).

The economy of Maui County is heavily dependent upon the visitor industry. In 1996, for example, total visitor arrivals numbered 2.3 million (Maui County Data Book, 1998). The dependency on the visitor industry is especially evident in Kihei-Makena, which is one of the State's major resort destination areas. The openings of the Four Seasons Resort, Kea Lani Hotel, and the Grand Wailea Resort Hotel & Spa have boosted the region's significance as a resort destination. Support for the visitor industry is found in Kihei, where retail commercial centers are found. As of January 2000, the unemployment rate for Maui County and the island of Maui stood at 5.1 percent and 4.8 percent, respectively (State Department of Labor and Industrial Relations, March 2000).

From a regional standpoint, the subject property is part of the Kihei-Makena Community Plan region which stretches from Maalaea to La Perouse Bay. The region includes a diverse range of physical and socio-economic environments. With its dry and mild climate and proximity to recreation-oriented shoreline resources, the visitor-based economy has grown steadily over the past few years. The town of Kihei serves as the commercial and residential center of the region with the master-planned communities of Wailea and Makena serving as the focal point for visitor activities.

The County of Maui's Police Department is headquartered in Wailuku, approximately 5.5 miles to the northwest of the project site. The Department consists of several patrol, investigative, and administrative divisions. The Department's Kihei substation

is situated in the Kihei Town Center, about 5.5 miles to the southeast of the site.

Fire prevention, suppression and protection services are offered by the Maui County Fire Department. The Department's Kihei Station is located on South Kihei Road, approximately 5.5 miles to the southeast of the project site, while its Kahului Station is situated on Dairy Road, about 5.0 miles to the north of the site.

Maui Memorial Medical Center, Licensed for 194 beds, is the only major medical facility on the island that provides acute, general, and emergency care services for residents and visitors. Medical/dental offices are located in the Kihei area to serve the region's residents.

Diverse recreational opportunities are available in the Kihei-Makena region. Recreational facilities in close proximity to the project site include the Maipoina Oe Iau Beach Park, Kalepolepo Park, Silversword Golf Course, Kalama Park, Kamaole Beach Park, and numerous other beach parks along the Kihei coastline. Shoreline recreation includes swimming, fishing, picnicking, snorkeling, and windsurfing.

The Wailea-Makena resort areas to the south of the project site offers additional opportunities for golf, tennis and ocean-related activities.

The State Department of Education operates three (3) schools in the Kihei area. Kihei Elementary School and Kamali'i Elementary School both cover grades K to 5, while Lokelani Intermediate School includes grades 6 to 8. Public school students in grades 9 through 12 attend Maui High School in Kahului.

As previously noted, Murrayair operated a small aerial crop dusting facility on a portion of the project site. Murrayair provides exclusive agricultural spraying for HC&S in return for rent-free operations and has been using the site since 1966.

4.10 Environmental Justice. On February 11, 1994, the President issued Executive Order 12898 addressing environmental justice in minority and low-income populations. This order requires federal agencies to expand the NEPA process to include a consideration of the environmental effects on minority and low-income populations.

On April 21, 1997, the President issued a similar Executive Order 13045 that requires federal agencies to identify and assess environmental health and safety risks that may disproportionately

affect disadvantaged children. Federal agencies shall address this executive order in the NEPA process.

The proposed armory in Puunene lies in an isolated non-residential area, approximately 2.0 miles from the town of Kihei and 6.0 miles from Kahului. The proposed facility will have a fence around it to restrict unauthorized access by all members of society, including minorities, people with low incomes, and disadvantaged children. Minority populations, low-income populations, and disadvantaged children do not exist directly adjacent to the facility, nor will they have access to the facility.

4.11 Infrastructure.

Waste Disposal. Solid waste collection service is provided by the County of Maui on a once-a-week basis. Solid waste collected by County crews are disposed at the County's 55-acre Central Maui Landfill located 4.0 miles southeast of the Kahului Airport. In addition to County-collected refuse, the Central Maui Landfill accepts commercial waste from private collection companies.

Roadway System. The project site is located about 6.0 miles from Kahului and 2.0 miles from Kihei. Access to the site would be provided by an access road off Mokulele Highway, a two-way, two-lane, undivided State highway that traverses the midsection of the island to link Kahului with Kihei. See Appendix C.

Mokulele Highway is relatively straight and flat throughout its alignment and includes a pavement width of 30 feet within a right-of-way of 40 feet. The southern extent of Mokulele Highway connects with Piilani Highway which provides access to the communities of Kihei, Wailea, and Makena. The posted speed limit along Mokulele Highway is 50 miles per hour (mph).

Water. Domestic water for the Kihei-Makena region is provided by the County Department of Water Supply's (DWS's) Central Maui System. The major source of water for this system is the Iao Aquifer. The sustainable yield of the Iao Aquifer is 20 million gallons per day (MGD). As of February 1, 2000, the rolling annual average groundwater withdrawals from the Iao Aquifer were 18.589 MGD. These withdrawals are within the limits of the 20 MGD sustainable yield of this aquifer.

Waterlines in the vicinity of the project site include an existing 6-inch cast iron waterline situated along Mokulele Highway, as well as existing 36-inch concrete and 18-inch cast iron waterlines which service South Maui, located in nearby Mehamaha Loop. Former water system improvements in the area include a World War II-era

water tank site north of the Hawaiian Cement Quarry and two (2) abandoned wells in the old Puunene Airport area east of Mokulele Highway.

Wastewater. Presently, there is no County wastewater system in the vicinity of the project site. The site is located beyond the limits of the County's nearest wastewater reclamation system, which extends from North Kihei to Makena. There is an existing septic sewer system within the area which appears to be abandoned. As part of the proposed project a new septic system will be constructed to facilitate wastewater generated from the facility. HIARNG will obtain permits upon design and completion of the system.

Electrical and Telephone Systems. Electrical and telephone services in the Kihei region are provided by Maui Electric Company and Verizon Hawaiian Telephone, respectively. The electrical and telephone systems in the vicinity of the project site are located above ground along Mokulele Highway.

4.12 Hazardous Materials. To address potential hazardous materials located at the site before construction, the DAGS contracted environmental consultants to perform environmental assessments for the property. Initially, based on the history and past activities of the site, a Property Site Inspection (PSI) of the subject property was prepared in September 1998. DAGS contracted consultants to perform a PSI of the project site to identify suspect asbestos-containing building materials and to identify lead hazards, existing and potential surface contamination hazards, and any other identifiable environmental hazards that may exist.

The PSI indicated that: the area was once used as a naval air station and the possibility exists that unexploded ordnance may be found at the project site; fuel and chemical spills may have occurred due to military and agricultural uses; and it is also possible that pesticides may have contaminated portions of the site due to Murrayair's crop dusting operations. A copy of the PSI is included in Appendix D.

In November 2001 HC&S retained Terrasano LLC (Terrasano) to perform a Phase 1 ESA on the subject property. Terrasano's recommendations pertaining to the subject property were: no further action on pesticide evaluation, conduct an asbestos and lead paint survey on structures to be demolished, evaluate petroleum and solid wastes discarded by trespassers and dispose of them in accordance with applicable requirements, and potential PCB impact be evaluated under the Formerly Used Defense Site program.

In February 2002 personnel from the HIARNG performed a limited site inspection of the property. Specifically, HIARNG personnel inspected the area where the footprint of the MCRC would be constructed as well as the surrounding area. Findings indicated that the area consisted primarily of a former cantonment area and a portion of a airport taxiway. HIARNG personnel did not observe evidence indicating the presence of UXO or UST.

On February 11, 2002 the State of Hawaii Department of Health (DOH) responded to a DAGS request for review of the Phase 1 ESA. The DOH objected to Terrasano's conclusion that no further evaluation of agricultural chemicals is recommended. Copies of the correspondence letters are presented in Appendix E.

In June 2002, CDS International (CDC), the contractor for DAGS, contracted J.R. Herold & Associates (J.R.H&A) to conduct a Phase 2 ESA. J.R.H&A conducted a limited pesticide analysis and UST Search. Results of these activities indicated the samples collected did not result in pesticide concentrations above levels that would adversely affect human health or impact ecological receptors. In addition, the Phase 2 ESA did not reveal the presence of unknown USTs. Copies of the ESAs are presented in Appendix D.

SECTION 5.0: ENVIRONMENTAL CONSEQUENCES

5.1 Land Use

5.1.1 Effects of the Proposed Action. Other than the displacement of Muurayair (see Section 5.8) the proposed project is not anticipated to have an adverse impact on surrounding land uses. The lands underlying the project site are within the limits of Project District 10. The proposed use of these lands is consistent with the uses established for Project District 10 as set forth by the Kihei-Makena Community Plan. The proposed project is considered compatible and complementary with existing and planned surrounding uses.

The proposed development will not detract from the existing character of the surrounding environment. Building mass and scale are deemed appropriate in the context of future master-planned uses of the former Puunene Airport area. The HIARNG does not anticipate that the proposed project will have an adverse impact upon views or scenic areas.

5.1.2 Effects of Alternatives to the Proposed Action. The alternative designs and layouts are consistent with Project District 10 in the Kihei-Makena Community Plan. Likewise, the alternative designs exhibited appropriate building mass and scale in the context of the future master plan for the Puunene airport area. Thus the anticipated effects of this alternative would be the same as described in Section 5.1.2.

5.1.3. Effects of the No Action Alternative. The no action or no build alternative would involve a continuation of the underutilized and un-maintained nature of the property. The no action alternative would violate the land use allocations set forth in the Kihei-Makena Community Plan and the Puunene Airport Master Plan. Thus if HIARNG did not build the proposed armory in Puunene, another State or County agency would probably develop the site in a manner compatible with the above plans.

5.2 Air Quality

5.2.1 Effects of the Proposed Action.

During the short term, the proposed action will involve construction activity that may be a source of airborne emissions. Dust generated from construction activities typically results from clearing and grubbing activities. Construction equipment may also be a source of airborne emissions that would otherwise not be present at the site. To mitigate the impacts of dust during construction, Best Management Practices (BMPs) shall be incorporated in site construction activities in accordance with Chapter 20.08 of the Maui County Code. Construction activity will occur during daylight work hours.

From a long-term perspective, the proposed action is not expected to result in adverse air quality impacts. The project site is located in an Attainment area.

5.2.2 Effects of the Alternatives to the Proposed Action. Alternative armory designs and layouts on the same site would result in a similar level of clearing, grubbing, and construction. Therefore, the short term air quality impacts would be the same as described in Section 5.2.1. In terms of long-term impacts, this alternative would not result in any adverse air quality effects.

5.2.3 Effects of the No Action Alternative. The No Action Alternative would have no effect on air quality, as this alternative would not result in any change to the existing air quality condition.

5.3 Noise

5.3.1 Effects of the Proposed Action. During the short term, the proposed action will involve construction activity that may be a source of noise. Construction noise is attributable to material hauling trucks and operation of onsite equipment during the building period. Construction activity will occur during daylight work hours. The contractor shall be responsible for properly maintaining vehicle and equipment engines to ensure their efficient operations. Finally, the contractor shall be required to comply with Hawaii Administrative Rules, Chapter 11-46 relating to "Community Noise Control".

In the long term, the HIARNG does not expect a significant increase to ambient background noise levels from occasional helicopter use involving the proposed helipad. The helipad, which would be designed and operated in accordance with U.S. Army standard located in TM 5-803-7, would be utilized to occasionally support civil authorities and medical emergencies, as well as serve as a stop-over point during HIARNG training exercises. It should be noted that these training exercises are necessary in order to maintain the HIARNG's operational readiness. It should also be noted that the flight tracks for the occasional approaching and departing helicopters would be formulated to avoid residential areas that are located 2-miles away. In addition, the loading and unloading of cargo and personnel would occur while the helicopter's engines are still running thereby eliminating engine warmup time and minimizing overall noise exposure. In light of the foregoing, and when considering the limited number of helicopter takeoffs and landings, noise associated with helipad use would be brief and its effects temporary.

The HIARNG does not anticipate that noise associated with the proposed use will adversely affect ambient noise conditions. Furthermore, anticipated noise levels are compatible with the governmental, industrial, and recreational type uses set forth for this area by the Kihei-Makena Community Plan and the Puunene Airport Area Master Plan. The project location is within the flight path of the Maui airport and the limited noise output associated with occasional helicopter flights is minimal. No noise analysis is required by the State of Hawaii.

5.3.2 Effects of the Alternatives to the Proposed Action. Alternative armory designs and layouts on the same site would result in a similar level of construction and construction noise. Additionally, the long-term noise effects from this alternative would be comparable to those described in Section 5.3.1. In

summary, the overall noise impacts of this alternative would be the same as the impacts of the proposed action.

5.3.3 Effects of the No Action Alternative. The No Action Alternative would have no effect on noise, as this alternative would not result in any change to the existing noise condition

Geology and Soils

5.4.1 Effects of the Proposed Action. Soils in this area have been previously disturbed by the construction of the former Naval base. The proposed action would have no affect on the geology of the area, nor would it affect the soils.

5.4.2 Effects of the Alternatives to the Proposed Action. In terms of geology and soils, the effects of this alternative would be the same as described in Section 5.3.1.

5.4.3 Effects of the No Action Alternative. The No Action Alternative would have no effect on geology and soils, as this alternative would not result in any change to the existing air quality condition.

Water Resources

5.5.1 Effects of the Proposed Action. Grading for the proposed project will involve excavation and embankment for the construction of roadways, building pads, parking areas, and a retention basin. Erosion control measures and Best Management Practices (BMPs) would be implemented during the construction period to minimize soil loss and erosion.

Examples of measures for minimizing the effects of soil erosion and fugitive dust include the following:

1. Minimize the time of exposure of the graded areas
2. Water graded areas with water trucks or a temporary sprinkler system.
3. Water graded areas after construction has ceased for the as well as on weekends and holidays.
4. Create temporary diversion swales to prevent runoff from affecting adjacent and downstream properties, as necessary.

A detailed grading and erosion control plan would be prepared in accordance with County standards and would be submitted to the

County Department of Public Works and Waste Management for review and approval. An application for a National Pollutant Discharge Elimination System (NPDES) permit will also be submitted to the State Department of Health for review and approval.

Based on a 50-year, 1-hour storm, existing onsite runoff has been estimated at 89.1 cfs, while post-development runoff is calculated at 91.8 cfs. The proposed drainage plan for the project requires site grading and the installation of an underground drainage system. Increases in runoff due to the proposed development would be captured by drain inlets and conveyed by drainlines to a proposed retention basin in the southwest corner of the project site. Refer to Appendix A.

The proposed improvements would be designed to produce no adverse effects to adjacent and downstream properties. All improvements will conform to and be designed in accordance with applicable regulatory requirements.

In terms of impacts to Maui's fresh water resources, the Puunene Airport Area Master Plan notes that the State Department of Health's UIC line is located approximately 1.0 mile upslope of the master plan area. The UIC line generally denotes the limits of the protected aquifer boundaries, and therefore areas seaward of the UIC line, including the project area, are not considered to be located over underground sources of drinking water. Thus, the proposed action should not adversely affect underground sources of drinking water.

Finally, since the area lies beyond the tsunami inundation zone, This type of flooding has no effect on the proposed action.

5.5.2 Effects of the Alternatives to the Proposed Action. In terms of water resources, alternative designs in the same area would involve similar levels of grading, embankment construction, and other types of construction. Therefore, this alternative would necessarily include a detailed grading and erosion control plan in accordance with County standards, an application for an NPDES permit, and the implementation of BMPs. Since only the armory layout would differ within the parcel, the increase in runoff from alternative designs would be comparable to those described in Section 5.4.1. Likewise, anticipated impacts to underground drinking water sources and tsunami flood zones would be the same as Section 5.4.1.

5.5.3 Effects of the No Action Alternative. The No Action Alternative would have no effect on water resources, as this

alternative would not result in any change to the existing resources.

Biological Resources

5.6.1 Effects of the Proposed Action. There are no known sensitive habitats or rare, threatened or endangered species of flora and fauna on the project site or adjacent areas. Accordingly, the proposed action should not have an adverse impact upon these environmental features.

5.6.2 Effects of the Alternatives to the Proposed Action. In terms of biological resources, the effects of this alternative would be the same as described in Section 5.3.1.

5.6.3 Effects of the No Action Alternative. The No Action Alternative would have no effect on flora and fauna, as this alternative would not result in any change to the existing habitat condition.

Cultural Resources

5.7.1 Effects of the Proposed Action.

GYA's Archaeological Inventory Survey of the project area notes that the only extant structural remains consist of concrete foundations, some upright elements, and floor slabs. Due to the highly disturbed condition of these features, they are no longer considered significant.

According to GYA's survey, the only intact features are the swimming pool, handball courts, and five underground splinter shelters. With the exception of the splinter shelters, these features are also no longer considered significant. In addition, no traditional Hawaiian remains were located in the project area, and the potential for such remains are considered minimal to nil.

The survey recommends no further archaeological work other than detailed plan mapping of the five intact splinter shelters. Following the completion of further documentation (mapping, photography), these features will no longer be significant. The survey indicates that due to the nature and extent of previous disturbances, archaeological monitoring of construction activities is not warranted.

Insofar as the splinter shelters are concerned, the SHPD suggested that simple avoidance (preservation) is a possibility that would not require further documentation.

In a letter dated May 29, 1999, the State Historic Preservation Division (SHPD) noted that the remnants of structures are "no longer significant" since the structures themselves were demolished and only remnant foundations exist. The Maui Public Works Administrator followed up on the SHPD letter agreeing that simple avoidance is a viable option. Copies of the letters are presented in Appendix F and Appendix G, respectively.

On August, 23, 1999, the State Department of Accounting and General Services, on behalf of the HIARNG, indicated that while avoidance is a viable option, mitigative measures would be determined during the project's planning phases and may consist of avoidance, data recovery, or a combination of these measures. See Appendix F.

During the project's conceptual development stage, the boundary of the project site was modified. In a August 4, 1999 letter to the SHPD from the project's consulting archaeologist, it was noted that the change in the project's limits does not necessitate any additional archaeological field work or revisions to the archaeological inventory survey since these areas have already been covered and the boundary modification involves no new features. See Appendix F.

Approximately two-thirds of the splinter shelters are located on lands belonging to State of Hawaii but not in control of the HIARNG. The remaining one-third is located on HIARNG land outside of the construction and fenceline area. Upon recommendation of the SHPD the HIARNG modified the fenceline to place the splinter shelters outside of project influence. Construction activities will not impact the splinter shelters. On April 26, 2002 the SHPD acknowledges Section 106 compliance of this project as it will have no affect on historic properties. A copy of the acknowledgement letter is included in Appendix F.

In the event any significant remains are inadvertently encountered during construction, work would be halted in the immediate vicinity of the discovery, and the SHPD shall be notified. Appropriate measures to ensure compliance with Chapter 6E, HRS will then be implemented through consultation with the SHPD.

5.7.2 Effects of the Alternatives to the Proposed Action. Since this alternative involves different design alternatives on the same parcel, the impact to cultural resources would be essentially the same as Section 5.7.3. As in the proposed alternative, the HIARNG will halt construction immediately and consult with the SHPD if workers encounter any significant cultural features.

5.7.3 Effects of the No Action Alternative. The No Action Alternative would have no effect on cultural resources, as this alternative would not result in any change to the existing site condition.

5.8 Socioeconomics

5.8.1 Effects of the Proposed Action. The proposed action is anticipated to have a positive economic effect during the construction phase of development as expenditures for construction and related support services are made. In the longer term, the proposed project will contribute to the local economy through the payment of taxes and employee wages and salaries, as well as through the purchases of goods and services from local merchants and service providers. The proposed project is not anticipated to have a significant impact on population.

As previously noted, Murrayair operates an aerial crop dusting facility on a portion of the project site. The Murrayair facility measures about 75 to 100 feet in width and approximately 2,200 feet in length and occupies an approximately 3-acre site which is located on a taxiway of the former Puunene Naval Air Station, adjacent to Mokulele Highway. Murrayair provides exclusive agricultural spraying for HC&S in return for rent-free operations and has been using this site since 1966.

Within the project area, the development of the site for the proposed project would displace Murrayair's operations. However according to the general lease (No. S-4197) relocation costs or displacement provisions are not required by the State of Hawaii.

From a regional perspective, the proposed action is not anticipated to have an adverse impact upon surrounding uses and is considered compatible with existing and planned land uses in the vicinity.

The proposed project is not anticipated to affect the service capabilities of police, fire and emergency medical operations. The project will not extend the existing service area limits for emergency services.

Finally, since the proposed project is not considered a population generator, the proposed improvements will not place any new demand on recreational and educational facilities and services.

5.8.2 Effects of the Alternatives to the Proposed Action. In terms of population, economic effects, Murrayair operations, land use plans, recreational facilities, and police, fire, and medical

services, the HIARNG expects alternative designs on the same parcel to have the same effects as described in Section 5.8.3.

5.8.3 Effects of the No Action Alternative. The No Action Alternative would have no effect on socioeconomic conditions, as this alternative would not result in any change to the existing condition.

Environmental Justice

5.9.1 Effects of the Proposed Action. As discussed in Section 4.10, the site of the proposed project lies in an isolated area, approximately 2.0 miles from the residential area of Kihei and 6.0 miles from Kahului. The proposed project is in consonance with the intent of aforementioned master and community plans developed for the area. The proposed MCRC will be secure to prevent access to the facility. Due to the isolated location, use of the facility and the secure nature of the MCRC, the proposed action will not displace or have an effect on the health and safety of disadvantaged children, minority or low-income populations.

5.9.2 Effects of the Alternatives to the Proposed Action. Since this alternative features different designs and layouts on the same parcel, the impact on environmental justice is the same as described in Section 5.9.1.

5.9.3 Effects of the No Action Alternative. The no action alternative has little or no effect on environmental justice.

Infrastructure

5.10.1 Effects of the Proposed Action.

Waste Disposal. A private waste contractor will provide solid waste collection and disposal services for the proposed facility.

In addition, the operation of the proposed Organizational Maintenance Shop (OMS) will utilize appropriate design measures and Best Management Practices (BMPs) to ensure that the disposal of waste products used in servicing vehicles, equipment, and machinery does not impact coastal water quality and surface and ground water resources. Examples of design measures include but are not limited to the following:

1. Construct the floor of the service area with smooth-finished concrete to prevent surface penetration and facilitate clean-up activities.

2. Install floor drains for washing down the service area and provide sufficient slope to the drains to prevent water from puddling.
3. Provide a dike or curb system around the service area for containment purposes.
4. Utilize an oil/water separator for the recovery of oils and fluids.

In addition, HIARNG training and operating procedures for the storage, handling, and disposal of waste products would be utilized in the operation of the OMS.

Roadway System. A Traffic Impact Report for the proposed project was prepared by Wilson Okamoto & Associates, Inc. in December 1999. Refer to Appendix C. The purpose of this report is to identify and assess the traffic impacts related to the proposed project, which is expected to be completed and occupied by the year 2002.

It should be noted that the State Department of Transportation (DOT) is planning to widen Mokulele Highway in the future. However, since the schedule for this road widening project is uncertain, the traffic report reflects a conservative approach by assuming that Mokulele Highway will remain at two (2) lanes at the completion of the Armory relocation project. In addition, the MEO Transportation Facility, which is located to the west of the project site, is assumed not to be constructed by the year 2002.

Existing Traffic Conditions. During the morning peak hour (7:30 a.m. to 8:30 a.m.) of traffic, Mokulele Highway, just north of the project's access road, carries a total of 1,942 vehicles; 822 southbound and 1,120 northbound, while during the afternoon peak hour (4:15 p.m. to 5:15 p.m.), it carries a total of 2,184 vehicles, 1,240 southbound and 944 northbound. During both the AM and PM peak hours, the highway operates at level of service (LOS) "E".

During the off-peak hour of traffic, Mokulele Highway carries a total of 1,491 vehicles, 683 southbound and 808 northbound. The highway operates satisfactorily at LOS "D".

Projected Traffic Conditions. In the year 2002 without the project, Mokulele Highway is estimated to carry a total of 2,158 vehicles during the AM peak hour of traffic, 913 southbound and 1,245 northbound, and a total of 2,427 vehicles during the PM peak hour, 1,378 southbound and 1,049 northbound. Off-peak hour traffic projections reflect a total of 1,657 vehicles, 759

southbound and 898 northbound. Mokulele Highway is also projected to operate at LOS "E" during AM and PM peak periods of traffic, as well as during the off-peak hour.

For the year 2002 with the project, Mokulele Highway is anticipated to carry a total of 2,158 vehicles during the AM peak hour of traffic, 913 southbound and 1,245 northbound, and a total of 2,427 vehicles during the PM peak hour, 1,378 southbound and 1,049 northbound. Off-peak hour traffic projections reflect a total of 1,657 vehicles, 759 southbound and 898 northbound. The highway is anticipated to operate at LOS "E" during the AM and PM peak hours of traffic, as well as during the off-peak hour.

As indicated by the traffic report, the impact of the proposed project on Mokulele Highway is relatively minimal during the estimated AM and PM peak periods. The overall increase in intersection traffic due to the project is 0.4 percent and 0.3 percent for the morning and afternoon peak hours, respectively.

Recommendations. Based upon the analysis of traffic data, the traffic report sets forth the following recommendations:

1. Provide an exclusive right-turn deceleration lane on the northbound approach to the intersection of Mokulele Highway and the project access road.
2. Provide an exclusive left-turn lane on the southbound approach of Mokulele Highway onto the project access road.
3. Provide an acceleration lane on northbound Mokulele Highway for right-turning vehicles exiting the project site.

Conclusion. The traffic report notes that by implementing the above recommendations, the proposed project will not have an adverse impact on traffic in the vicinity. The report notes that much of the traffic attributable to the project will occur during off-peak hour periods and that the increase during the peak hours is minimal compared to the overall growth in traffic volumes due to external sources. The report also notes that coordination with the DOT is needed to ensure that adequate ingress and egress to the project site is accommodated in the design of its highway widening project.

Water. Domestic water for the proposed project would be provided by the County's potable water system which serves the region. Recent discussions with the Department of Water Supply (DWS) have indicated that new sources would be brought on-line to supplement the water provided by the Iao Aquifer.

The preliminary domestic water demand for the proposed project is estimated to be approximately 7,100 gallons per day (gpd). Refer to Appendix A. The existing 6-inch waterline along Mokulele Highway would be utilized to provide domestic water service for the project. An onsite fire protection system consisting of wells, a storage tank and a fireline would be implemented to provide fire protection for the project. The proposed project is not anticipated to adversely impact regional water service requirements. Water requirements for the project would be coordinated with the DWS to ensure that adequate supply is available at the time of development. In addition, calculations for domestic, irrigation, and fire protection use would be submitted to the applicable governmental agencies in connection with the processing of the project's building permit application.

Wastewater. Preliminarily, the wastewater flow generated by the proposed project is estimated to be approximately 2,700 gpd. Refer to Appendix A. The County of Maui has a long range master plan for the area which includes a new central wastewater treatment plant, as well as force mains and gravity lines. However, the County has no immediate plans to provide sewer service in the area. Accordingly, a new septic sewer system would be implemented for the project.

The proposed project is not expected to place significant new demands on existing wastewater system capacities or facilities. In addition to coordinating wastewater system improvements with the appropriate governmental agencies, wastewater contribution calculations would be submitted to the applicable governmental agencies in connection with the project's building permit application review phase.

Electrical and Telephone System. Electrical and telephone services for the proposed project would be coordinated with Maui Electric Company and GTE Hawaiian Tel, respectively.

5.10.2 Effects of the Alternatives to the Proposed Action. Since alternative layouts of the armory would occupy the same 30-acre parcel, the overall infrastructure effects in terms of waste disposal, roadways, water, wastewater, electrical and telephone systems would be the same as described in Section 5.10.1.

5.10.3 Effects of the No Action Alternative. The no action alternative has little or no effect on infrastructure.

5.11 Hazardous Waste The HIARNG uses OMS throughout the state for vehicle and equipment maintenance. These shops handle a variety of non-hazardous and sometimes hazardous materials as a part of their operations. The HIARNG provides the personnel who handle these materials with training on the procedures and regulations that ensure proper handling and disposal of generated wastes. The HIARNG anticipates generating used oil, fluorescent bulbs, antifreeze and other wastes associated with occasional light vehicle maintenance. HIARNG will store and manage wastes (hazardous & non-hazardous) generated from light maintenance activities in accordance RCRA and both the HIARNG Solid Waste and Hazardous Waste Management Plans. HIARNG will perform helicopter maintenance at Army Aviation Support Facilities (AASF) located on the Islands of Oahu and Hawaii.

5.11.1 Effects of the Proposed Action. The Puunene Airport Area Master Plan and September 1998 ESA notes that the soil in some portions of the FNAS may be contaminated, as fuel and chemical spills may have occurred over the years related to military or agricultural uses. It is also recognized that there is the possibility that UXO may also be found at the project site, as the area was once used as a Naval Air Station. In addition, it should be noted, that the report indicates that there is no mention of any unexploded ordnance in any of the engineering survey reports conducted for the master planning process, nor have any of the present users of the area discovered any such material. Observations by HIARNG made during a February site inspection did not indicate the presence of UXO or UST. The proposed location is located in the FNAS cantonment area and adjacent to the old Puunene airport runway taxi area.

The current DAGS Phase 2 ESA for the project recommends that no further action is required for suspect asbestos-containing building materials, lead based paints, PCB containing equipment, UST investigation, delineation of potential petroleum contamination, and pesticide sampling concerning construction of the MCRC.

In terms of future chemical use, the use of herbicides on the project site will generally be limited to the initial plant establishment period. Pesticides are anticipated to be used only as a treatment and not as a preventive measure. As a treatment, application usage would be minimal. In addition, plant selection for the project would be based on hardiness, drought tolerance, pest resistance, as well as aesthetic concerns.

Nitrogen/Phosphorus/Potash mixed fertilizers are anticipated to be applied to landscaped areas. With proper irrigation management practices, leaching of fertilizers should be negligible.

No adverse effects on surface, underground and marine water resources are anticipated.

5.11.2 Effects of the Alternatives to the Proposed Action. The HIIARNG anticipates that alternative designs and layouts on the same parcel will have the same effects as described in Section 5.11.1.

5.11.3 Effects of the No Action Alternative. The no action alternative has little or no effect on hazardous or toxic materials and waste.

5.12 Mitigation Measures. Implementation of the proposed action will not have significant environmental impacts on the environment. However, the HIIARNG will complete the following mitigation measures to decrease the minor effects that may result from this project. The following measures will mitigate the impacts on land use, air quality, noise, water resources, cultural resources, infrastructure, and hazardous materials.

Land Use. Since the proposed project will displace Murrayair, HC&S will assist in the relocation of Murrayair operations in connection with the project development process. The terms of the State of Hawaii general lease (No. S-4197) with Murrayair do not require the State or HIIARNG to provide relocation costs or displacement provisions.

Air Quality. To mitigate the impacts of dust during construction, the HIIARNG will implement BMPs in accordance with Chapter 20.08 of the Maui County Code.

Noise. The contractor will work during daylight work hours and comply with Chapter 11-46, Hawaii Administrative Rules (HAR), relating to "Community Noise Control." The HIIARNG will formulate flight tracks to avoid residential areas and conduct loading and unloading operations while helicopter engines are still running to eliminate engine warmup time and minimize noise exposure.

Water Resources. The HIIARNG will implement erosion control measures and BMPs during construction to minimize soil loss and erosion. These temporary measures include minimizing exposure time of graded areas, watering down graded areas, and creating temporary diversion swales. In terms of long-term mitigation, the HIIARNG will submit a detailed grading and erosion control plan to

the County Department of Public Works and Waste Management for review and approval. No mitigation is required for the installation and operation of the septic system.

Cultural Resources. As stated in the Department of Accounting and General Services letter of August 23, 1999, avoidance appears viable as an option. During the project's planning phases, the HIARNG will determine and finalize mitigation measures including avoidance, data recovery, or a combination of these measures. In case workers inadvertently encounter significant remains during construction, work shall halt in the immediate vicinity of the discovery until the HIARNG notifies the SHPD and acceptable mitigation measures can be determined.

Infrastructure. As discussed in Section 5.10.1, the HIARNG will implement appropriate design measures and BMPs to eliminate the potential for contamination to United States waters. These measures include impenetrable work areas, floor drains, curb systems, and oil/water separators. In terms of traffic mitigation, the project will include an exclusive right-turn deceleration lane on the northbound approach, an exclusive left-turn lane on the southbound approach, and an acceleration lane for northbound traffic exiting the project site.

Hazardous Materials. Based on site inspections performed by HIARNG personnel and information provided by the DAGS, the HIARNG does not anticipate finding UXO, major petroleum releases or widespread pesticide contamination. The HIARNG will ensure that contamination from past practices (Murrayair/FNAS Puunene), if discovered, will be brought to the attention of the DAGS.

5.13 Cumulative Impacts

Cumulative impacts are those impacts that result from the incremental impact of an action added to other past, present, and reasonably foreseeable actions in the future. Examples of impacts from past and present actions include those from contaminated sites, ongoing activities that result in waste generation, and construction activities. Both Council on Environmental Quality regulations and DOD regulations for implementing the National Environmental Policy Act (NEPA) require HIARNG to assess cumulative impacts because significant impacts can result from several smaller actions that individually might not have significant impacts.

The proposed construction of the MCRC would be beneficial to the community and the HIARNG as it is in conjunction with both the Puunene Airport Area Master Plan and the Kihei-Makena Community

Plan objectives of providing a suitable area for government and recreational uses. As a result, the proposed project would enhance the area aesthetically; utilize vacant and dilapidated lands, while providing an adequate, modern location for HIARNG units.

The HIARNG concludes, through analysis of the proposed project, that negative long term cumulative impacts on the resources affected by the proposed action are not expected. Short term effects, such as dust generated by construction activities, are not expected to affect air quality outside of the proposed location.

SECTION 6.0: COMPARISON OF ALTERNATIVES AND CONCLUSIONS

6.1 Comparison of the Environmental Consequences of the Alternatives

In summary, the No Action alternative would not impact environmental conditions of the property as the property would remain as is. However, through evaluation, the HIARNG foresees no significant impacts on the environment as whole or on specified resources from the proposed action.

6.2 Conclusions

The proposed action would meet the existing training and mission requirements of the Department of the Army and the HIARNG in the most effective way. The proposed action is in accordance with State land use plans (Chapter 205, HRS), the General Plan of the County of Maui, the Kihei-Makena Community Plan, the Puunene Airport Master Plan, Maui County zoning codes (Chapter 19.30), and the Hawaii Coastal Zone Management Program.

Chapter 11-200 of the State Department of Health Administrative Rules specifies the criteria for determining if an action may have a significant effect on the environment. As discussed in the State EA done by Munekiyo, Arakawa, and Hiraga, Inc. in June 2000, the proposed action is not likely to involve any of the following criteria:

- destruction of any natural or cultural resource;
- curtailment of the range of beneficial uses of the environment;

conflict with the State's long-term goals or guidelines as expressed in HRS Chapter 344;

- substantial effect on the economic or social welfare of the community or state;
- substantial effect on public health;
- substantial secondary effects, such as population changes or infrastructure demands;
- substantial degradation of environmental quality;
- cumulatively a considerable effect on the environment, or a commitment to a larger action;
- substantial effect on rare, threatened, or endangered species or its habitat;
- significant effect on air or water quality or ambient noise levels;
- significant effects on environmentally sensitive areas, such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, freshwater area, or coastal waters.
- substantial effects on vistas or viewplanes; or
- substantial consumption of energy

Based on the above discussion, and taking into account the suggested measures to preclude impacts, implementation of this project does not appear to be a major action significantly affecting the quality of the natural or human environment. There are no indications that implementation of the proposed action will violate Federal, State, or county environmental regulations. Implementation of the proposed action would not result in significant environmental effects and therefore an Environmental Impact Statement (EIS) is not required. The HIARNG anticipates A *Finding of No Significant Impact (FNSI)*.

7.0: REFERENCES

Community Resources, Inc., Maui County Community Plan Update Program Sock-Economic Forecast Report, January 1994.

County of Maui, Kihei-Makena Community Plan, March 1998.

County of Maui, Maui County Data Book 1998, June 1998.

County of Maui, Department of Water Supply, personal communication with Eva Blumenstein, January 6, 2000.

GYA Architects, Inc., Maui Army National Guard Armory, Hawaii Army National Guard (HIARNG) Project Development Report, April 1999.

GYA Architects, Inc., Puunene National Guard Armory, Hawaii Army National Guard (HIARNG) Master Plan Report, Draft Report, August 2000.

Hawaiian Commercial & Sugar Co., Ltd., personal communication with Randall Moore, March 16, 2000.

Helber Hastert & Fee, Planners, Inc., Puunene Airport Area Master Plan/MEO Transportation Facility Concept Plan (Final Report), May 1995.

International Archaeological Research Institute, Inc., Fire on the Land: Archaeology, Architecture, and Oral History of FNAS Puunene, Pulehunui, Maui (Draft), May 2000
Maui News, June 6, 1999.

Munekiyo, Arakawa & Hiraga, Inc., Application for Change in Zoning, Project District Phase I and II Approvals, and Special Management Area Use Permit - Palauea Subdivision, October 1999.

Munekiyo, Arakawa & Hiraga, Inc., Application for Land Use Commission Special Use Permit and Conditional Permit, Hawaii Army National Guard's Puunene Armory and Related Improvements, June 2000.

Munekiyo, Arakawa & Hiraga, Inc., Draft Environmental Assessment, Hawaii Army National Guard's Puunene Armory and Related Improvements, June 2000.
PBR Hawaii, Draft Environmental Assessment - Mokulele Highway, Puunene Bypass, March 1997.

State of Hawaii, Department of Labor and Industrial Relations, personal communication with Ray Domingo, March 1, 2000.

University of Hawaii, Department of Geography, Atlas of Hawaii Third Edition, 1998.

University of Hawaii, Land Study Bureau, Detailed Land Classification - Island of Maui, May 1967.

U. S. Department of Agriculture, Soil Conservation Service, Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii, 1972.

8.0 Acronyms

AASF	Army Aviation Support Facility
ALISH	Agricultural Land of Importance to the State of Hawaii
BMP	Best Management Practice
DAGS	Department of Accounting and General Services
DOH	Department of Health
DOT	Department of Transportation
DWS	Department of Water Supply
EA	Environmental Assessment
FAA	Federal Aviation Administration
FIRM	Flood Insurance Rate Map
FNAS	Former Naval Air Station
FNSI	Finding of No Significant Impact
HAR	Hawaii Administrative Rules
HC&S	Hawaii Commercial & Sugar Company
HIARNG	Hawaii Army National Guard
HRS	Hawaii Revised Statutes
LOS	Level of Service
MCRC	Maui Consolidated Readiness Center
MGD	Million Gallons Per Day
MEO	Maui Economic Opportunity, Inc.
NEPA	National Environmental Policy Act
NGB	National Guard Bureau
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NMP	Noise Management Plan
OMS	Organizational Maintenance Shop
RCRA	Resource Conservation Recovery Act
SHPD	State Historic Preservation Division
UIC	Underground Injection Control
UST	Underground Storage Tank
UXO	Unexploded Ordnance

9.0: List of Preparers

Much of the content for this Federal EA first appeared in the State EA written by Munekiyo, Arakawa, and Hiraga, Inc. in June 2000. The HIARNG simply adapted the format of the original document to meet NEPA and NGB requirements. The following individuals worked on this NEPA EA:

Mr. William Rogers, Installation Restoration Coordinator

Mr. Joel Myher, Geographical Information Systems Manager

LTC Ron Swafford, Environmental Protection Specialist, HIANRG

10.0: AGENCIES AND INDIVIDUALS CONSULTED

The following agencies were consulted during the preparation of the Draft EA. Agency comments and responses to substantive comments are included in Appendix I.

County of Maui, Department of Fire Control, Clayton Ishikawa, Chief

County of Maui, Department of Housing and Human Concerns, Alice Lee, Director

County of Maui, Department of Parks and Recreation, Floyd Miyazono, Director

County of Maui, Department of Planning, John Min, Director

County of Maui, Police Department, Tom Phillips, Chief

County of Maui, Department of Public Works and Waste Management, Charles Jencks, Director

County of Maui, Department of Water Supply, David Craddick, Director

Maui Economic Opportunity, Inc., Gladys Baisa, Executive Director

Maui Electric Company, Ltd., Ed Reinhardt, Manager Engineering Division

State of Hawaii, Department of Health, Bruce Anderson, Director

State of Hawaii, Department of Land and Natural Resources, Timothy Johns, Director

State of Hawaii, Department of Land and Natural Resources, State Historic Preservation Division, Don Hibbard, Administrator

State of Hawaii, Department of Transportation, Kazu Hayashida, Director

State of Hawaii, Office of Hawaiian Affairs, Randall Ogata, Administrator

U.S. Department of Agriculture, Natural Resources Conservation Service, Neal S. Fujiwara, District Conservationist

U.S. Department of the Army, Army Engineer District, Hnl., George P Young, Chief Regulatory Branch

U. S. Fish and Wildlife Service, Ecological Services, Robert P. Smith, Pacific Islands Manager

11.0: LIST OF PERMITS AND APPROVALS

The following permits and approvals would be required prior to the implementation of the project.

State of Hawaii

1. State Land Use Commission Special Use Permit
2. Community Noise Permit
3. NPDES Permit (for stormwater discharge associated with construction activities)

County of Maui.

1. Conditional Permit
2. Construction Permits (Grubbing, Grading, Building, Plumbing Electrical)